Test Administrator Instructions:

This practice test has Subpart 1, Subpart 2, and Subpart 3. There is also an answer document and an answer key at the end of this document. It is recommended that you print one copy of this practice test and pull the answer key before copying and distributing the practice test and answer document to your students.

This practice test is representative of the operational test but is shorter than the actual operational test. To see the details about the operational test, please see the blueprints located on the Tennessee Department of Education website.
Directions

This Practice Test booklet contains sample items for Grade 4 Math. Write your answers on your answer document.

You MAY NOT use a calculator in Subpart 1 of this test booklet.

Sample 1: Selected-Response

1. Three of the expressions below have a value of 12. Mark the three answer choices that have a value of 12 on your answer document.

   A. $2 \times 6$
   B. $5 \times 8$
   C. $7 \times 2$
   D. $4 \times 3$
   E. $1 \times 12$

Sample 2: Match

2. Match each fraction on the left with its equivalent fraction on the top row. Mark your answers on your answer document.

   |   |   |
---|---|---|
| $\frac{2}{4}$ | $\frac{2}{8}$ | $\frac{1}{3}$ |
| $\frac{2}{6}$ |   |   |
| $\frac{1}{2}$ |   |   |
| $\frac{1}{4}$ |   |   |
1. What is the sum of \( \frac{2}{100} + \frac{7}{10} \)?
   A. \( \frac{27}{10} \)
   B. \( \frac{27}{100} \)
   C. \( \frac{72}{10} \)
   D. \( \frac{72}{100} \)

2. Which decimal has the same value as \( \frac{68}{100} \)?
   A. 68.00
   B. 6800.00
   C. 0.68
   D. 6.8

3. A rectangle has an area of 156 square inches and a perimeter of 50 inches. Which are the correct width and length for the rectangle?
   A. width = 39 in  
     length = 4 in
   B. width = 5 in  
     length = 10 in
   C. width = 15 in  
     length = 10 in
   D. width = 13 in  
     length = 12 in
4. Cyndi measures the lengths of beads she is using to make a necklace. She creates a line plot to display her data.

If all the beads were placed in a line, end to end, what would be the total length of the line, in inches?

A. $\frac{7}{4}$

B. $2\frac{1}{2}$

C. $\frac{7}{5}$

D. $3\frac{2}{4}$
5. A pattern starts at 3 and has the rule “Add 4.”

Which numbers belong in the pattern?

A. 3
B. 13
C. 7
D. 23
E. 11
F. 28

6. What is the value of 4056 + 2173?

Write your answer in the space provided on your answer document.

7. Which expression can be used to correctly find the product of 27 and 30?

A. \((20 \times 7) + (30 \times 0)\)
B. \((2 \times 30) + (70 \times 30)\)
C. \((20 \times 30) + (7 \times 30)\)
D. \((2 \times 30) + (7 \times 30)\)
8. Eleanor is making sand art. She puts \( \frac{1}{2} \) cup each of 10 different colors of sand in a bottle.

How much sand, in cups, does she use?

Write your answer in the space provided on your answer document.

9. Select all the prime numbers.

A. 2  
B. 3  
C. 13  
D. 15  
E. 19  
F. 25
Directions

This Practice Test booklet contains sample items for Grade 4 Math. Write your answers on your answer document.

You MAY use a calculator in Subpart 2 of this test booklet.

10. A school needs vans for a field trip.

• There are 59 people going on the trip.
• Each van holds 8 people.
• The school has 6 vans. The rest will be rented.

How many vans will the school need to rent for all the people to have a seat?

A. 1  
B. 2  
C. 3  
D. 7
11. On your answer document, fill in the bubbles for each statement with the bubble below the correct number in the table. Some numbers in the table will not be used.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>627,500</td>
</tr>
<tr>
<td>627,339 rounded to the nearest ten thousand</td>
<td>○</td>
</tr>
<tr>
<td>627,582 rounded to the nearest hundred</td>
<td>○</td>
</tr>
<tr>
<td>627,449 rounded to the nearest thousand</td>
<td>○</td>
</tr>
</tbody>
</table>

12. Draw a right angle on the grid on your answer document.

[Grid with a drawn right angle]
13. The time line shows the times Matthew leaves home, arrives at the library, and arrives back at home.

It takes Matthew the same amount of time to walk home as it takes him to walk to the library.

How many minutes does Matthew stay at the library?

Write your answer in the space provided on your answer document.

14. On your answer document, mark “True” or “False” to show whether each comparison is true or false.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{3}{8} &lt; \frac{1}{2} )</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>( \frac{8}{10} &lt; \frac{3}{4} )</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>( \frac{5}{12} &gt; \frac{1}{4} )</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
15. Ms. Goldberg wrote a comparison on the board, as shown.

\[13,426 \ ? \ 12,389\]

Devin says 13,426 is greater. Bill says 12,389 is greater.

Who is correct and why?

A. Bill is correct, because the ones digit in 12,389 is greater than the ones digit in 13,426.

B. Bill is correct, because the value of the 2 in 12,389 is greater than the value of the 2 in 13,426.

C. Devin is correct, because the hundreds digit in 13,426 is greater than the hundreds digit in 12,389.

D. Devin is correct, because the thousands digit in 13,426 is greater than the thousands digit in 12,389.

16. Part A (Be sure to put your final answer on your answer document.)

- To partition the number line, divide the number line into tenths.

- Place a point at \(\frac{6}{10}\). Use the line below for practice.

```
0 -------------------------------------------------- 1
```

Part B (Be sure to put your final answer on your answer document.)

- To partition the number line, divide the number line into a different number of parts than in Part A and place a point at a fraction that is equivalent to \(\frac{6}{10}\). Use the line below for practice.

```
0 -------------------------------------------------- 1
```
17. On your answer document, draw and label ray $RS$ to complete angle $QRS$ so that angle $QRS$ measures $60^\circ$. Use the protractor below for practice.
18. A figure is shown on your answer document. On your answer document, circle the sides in the figure that appear to be parallel.
Directions

This Practice Test booklet contains sample items for Grade 4 Math. Write your answers on your answer document.

You MAY use a calculator in Subpart 3 of this test booklet.

19. Which comparison is true?
   A. 4.14 = 4.41
   B. 1.32 < 1.29
   C. 0.62 > 6.1
   D. 16.02 < 16.20

20. Joey’s dad is baking a cake. The recipe calls for two cups of flour. He has a scoop that measures \( \frac{1}{4} \) cup.

   How many \( \frac{1}{4} \) cup scoops of flour will he need to make the cake?
   A. 2
   B. 4
   C. 6
   D. 8
21. Caleb baked 12 batches of chocolate chip cookies. There were 16 cookies in each batch.

Part A
Write an equation, in the space provided on your answer document, to find the total number of cookies, \( c \), that Caleb baked.

Part B
How many cookies did Caleb bake?
Write your answer in the space provided on your answer document.

22. On your answer document, place a point on the number line to show 0.83.

![Number line](image)

23. Select all fractions that are less than \( \frac{3}{5} \).

A. \( \frac{1}{3} \)
B. \( \frac{2}{8} \)
C. \( \frac{5}{6} \)
D. \( \frac{2}{3} \)
E. \( \frac{5}{10} \)
24. Bert has 751 tickets to trade in for prizes at the fair. He picks a hat that costs 175 tickets and a teddy bear that costs 3 times as many tickets as the hat.

Select all of the true statements.

A. Bert has 226 tickets left.
B. Bert spends a total of 700 tickets.
C. The teddy bear costs 525 tickets.
D. The number of tickets that Bert has left is greater than the cost of the hat.
E. Bert has 51 tickets left.

25. Select all the numbers that have a digit in the ten thousands place that is 10 times the digit in the thousands place.

A. 221,462
B. 255,731
C. 266,894
D. 220,446
E. 277,580

26. Ramona bought 17 T-shirts for the soccer team. Each T-shirt cost $12. What was the total cost of the T-shirts?

A. $29
B. $84
C. $204
D. $294
27. Shade the fraction model to show a fraction that is equivalent to $\frac{3}{5}$.

Use the line fraction model below for practice. Draw your final answer on your answer document.

```
[Diagram of a line fraction model with five equal parts shaded]
```

28. On your answer document, for each number, fill in the bubble in the table to show if it is greater than 70,461 or less than 70,461.

<table>
<thead>
<tr>
<th></th>
<th>Greater Than 70,461</th>
<th>Less Than 70,461</th>
</tr>
</thead>
<tbody>
<tr>
<td>70,460</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>70,453</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>71,012</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>75,112</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>69,989</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>70,362</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
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Name: ____________________________________

Subpart 1 Sample Questions

1.  □ □ □ □ □

2.  
<table>
<thead>
<tr>
<th>2</th>
<th>2/8</th>
<th>1/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/6</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>1/2</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>1/4</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Subpart 1 Practice Test Questions

1.  □ □ □ □

2.  □ □ □ □

3.  □ □ □ □

4.  □ □ □ □

5.  □ □ □ □ □ □

6.  

7.  □ □ □ □

8.  

9.  □ □ □ □ □ □
### Subpart 2 Practice Test Questions

10.  

11. | Statements                                      | Numbers     |
     |                                                | 627,500  | 630,000 | 627,000 | 628,000 | 620,000 | 627,600 |
     | 627,339 rounded to the nearest ten thousand    | O        | O       | O       | O       | O       | O       |
     | 627,582 rounded to the nearest hundred         | O        | O       | O       | O       | O       | O       |
     | 627,449 rounded to the nearest thousand        | O        | O       | O       | O       | O       | O       |

12. 

---

22
13. 

14. | Comparison     | True | False |
    |----------------|------|-------|
    | $\frac{3}{8} < \frac{1}{2}$ | O    | O     |
    | $\frac{8}{10} < \frac{3}{4}$ | O    | O     |
    | $\frac{5}{12} > \frac{1}{4}$ | O    | O     |

15. A C D D

16. Part A: 
   0 1

   Part B: 
   0 1

17.
Subpart 3 Practice Test Questions

19.  A  B  C  D
20.  A  B  C  D
21. Part A:
Part B:

22. 0  1

23.  A  B  C  D  E
24.  A  B  C  D  E
25.  A  B  C  D  E
26.  A  B  C  D
27. 

<table>
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Subpart 1 Sample Questions

1. ● ○ ○ ● ●

2. |   |   |   |
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<tbody>
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<td>1/3</td>
</tr>
<tr>
<td>2/6</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1/2</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
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<td>○</td>
<td>●</td>
</tr>
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</table>

Subpart 1 Practice Test Questions

1. A  B  C  ●
2. A  B  ●  ○
3. A  B  ○  ●
4. A  B  ○  ●
5. ●  B  ●  ●  ●  F
6. 6229
7. A  B  ●  ○
8. 5
9. ●  ●  ●  ○  ●  F
Subpart 2 Practice Test Questions

10.  A  B  C  D

11. | Statements                                      | Numbers                       |
    |                                                | 627,500 | 630,000 | 627,000 | 628,000 | 620,000 | 627,600 |
    | 627,339 rounded to the nearest ten thousand    |        O  |      ●  |        O  |        O  |        O  |        O  |
    | 627,582 rounded to the nearest hundred         |        O  |      ●  |        O  |        O  |        O  |      ●  |
    | 627,449 rounded to the nearest thousand        |        O  |      ●  |        O  |        O  |        O  |        O  |

12. any right angle such as:

13.  50
14. | Comparison     | True | False |
    |-----------------|------|-------|
    | $\frac{3}{8} < \frac{1}{2}$ | ●    | ○     |
    | $\frac{8}{10} < \frac{3}{4}$ | ○    | ●     |
    | $\frac{5}{12} > \frac{1}{4}$ | ●    | ○     |

15. A B C ●

16. Part A:  
            0       1

Part B:  
          0       1

17. 

29
Subpart 3 Practice Test Questions

19.  
20.  
21. **Part A:** $12 \times 16 = c$  OR  $c = 16 \times 12$ or other equivalent equation  
**Part B:** 192

22.  

23.  
24.  
25.  
26.  
27. Any representation of 3/5 shaded on the fraction model
28. |   | Greater Than 70,461 | Less Than 70,461 |
<table>
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